

wherein the food was brought up from the crop and mixed with saliva before passing on to the intestines.

The fore legs were used with or without the middle legs to clean the head and proboscis, and the rear legs were used to clean the wings and abdomen. The middle legs were used for cleaning much less than either of the others and in no case was more than one of them removed at a time from the surface on which the fly rested. More time was devoted to cleaning the head and mouth parts than any other parts.

ARMY-ANT BEHAVIOR

The American Museum of Natural History has just published the results of Dr. T. C. Schneirla's behavior studies entitled "Army-Ant Life and Behavior Under Dry-Season Conditions, 3 The Course of Reproduction and Colony Behavior" (Bull. Amer. Mus. Nat. Hist., Vol. 94, Article 1, p. 1-82, 1949). The observations on which the study is based extended over a period of four and a half months in the dry season on Barro Colorado Island in the Canal Zone and involved the species *Eciton hamatum* and *Eciton burchelli*. The purpose was to determine if the general activities of army ants are materially affected by seasonal dry conditions. Detailed observations of particular colonies for a period of four months are presented together with records of other colonies for shorter periods of time, the whole being followed by an informative and interesting discussion of the variations in different phases of the behavior pattern of these ants. Dr. Schneirla concludes that the cyclic system of events making up the behavior pattern persists during both the rainy and dry seasons and that such differences as occur during the dry season are secondary and do not materially damage the orderly persistence of the events. Dr. Schneirla's present paper is another in his series of authentic and erudite contributions, dealing with the behavior of army ants, over many years.—H. B. W.